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June 15, 1995 File #530-7

Frank Faranca, Case Manager
New Jersey Department of
Environmental Protection
Division of Responsible
Party Site Remediation
Bureau of Federal Case Management
CN 028
401 East State Street
Trenton, New Jersey 08625-0028

Re:

Remedial Action Work Plan

Lenox China, Pomona, New Jersey

Dear Mr. Faranca:

This addendum to the April 1995 Remedial Action Work Plan (RAW) for the Lenox China facility was prepared in response to the May 15, 1995 letter summarizing New Jersey Department of Environmental Protection (NJDEP), United States Environmental Protection Agency (USEPA), and Pinelands Commission comments on the RAW. The May 15 letter indicates that the RAW is approved on condition that Lenox modify it to address the Department's comments.

Lenox responses are in the same order as the comments in the May 15 letter.

# Demonstrating the Effectiveness of the Remedial Action

The Department is requiring that Lenox demonstrate that the proposed Remedial Action will prevent further migration of lead and zinc in the subsurface soil to the groundwater. The only meaningful way to assess potential groundwater impacts from the clay waste is to continue monitoring groundwater quality downgradient of SWMU No. 2 and the AOC and statistically evaluate the data to determine whether there is a reliable trend. The groundwater monitoring data base developed between May 1993 and March 1995 shows that over 90 percent of the filtered samples collected immediately downgradient of the AOC do not contain lead at concentrations exceeding the  $10~\mu g/\ell$  PQL. Samples collected during the CEA monitoring program over the past 10 months from wells downgradient of the AOC seldom contained lead at concentrations exceeding the PQL, and there is no reliable upward trend in the data.

Continued . . .

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Frank Faranca New Jersey Department of Environmental Protection June 15, 1995

-2-

These groundwater monitoring data are consistent with the quantity and distribution of clay waste presented in the RFI report. The RFI report indicates that approximately 1050 cubic yards of clay waste is present in the subsurface soil at SWMU No. 2 and the AOC. A review of the historical groundwater elevation data base shows that the seasonal high water table at the site is approximately 63 feet above mean sea level. The Lenox property is relatively flat at an elevation of 65 feet above mean sea level, and soil collected at a depth of two feet or greater from soil borings drilled at SWMU No. 2 and the AOC has the potential to be in contact with the seasonal high water table. The RFI soil sampling data base shows that 14 of the 187 soil samples (approximately 7 percent) collected at a depth greater than 2 feet contained lead (the predominant parameter of concern) at concentrations exceeding the NJDEP cleanup guidelines. Assuming that an equal percentage of the total clay waste at these units is at or below the seasonal high water table, the total volume of waste which may be in direct contact with the groundwater is approximately 41 cubic yards.

Given the small quantity of clay waste which may be in contact with the seasonal high water table, the empirical groundwater monitoring data clearly demonstrates that the lead is relatively non-leachable at the Lenox site. Moreover, water percolating through soil at SWMU No. 2 and the AOC will flow around rather than through the discontinuous waste clay deposits because the clay waste is several orders of magnitude less permeable than the surrounding soil. The in situ condition limits the surface area of the clay waste that water can contact, in contrast to the artificially large surface area created by the EP Toxicity test.<sup>1</sup>

Lenox therefore believes that the proposed remedial action for SWMU No. 2 and the AOC is appropriate and that no other actions other than the routine CEA monitoring are required.

## N.J.S.A.58:10B-12(g)8 Certification

Section 4.7 of the RAW presents a cost comparison of the non-permanent and permanent remedial actions. The cost of the non-permanent remedy does not exceed 50 percent or more of the cost of a permanent remedy, and the criteria in N.J.S.A.58:10B-12(g)8 is satisfied.

<sup>&</sup>lt;sup>1</sup>Although the EP Toxicity test results show that lead can theoretically be leached from clay waste, for the reasons set forth above, this test does not accurately reflect the potential for lead to migrate from the waste to groundwater at the Lenox site.

Frank Faranca New Jersey Department of Environmental Protection June 15, 1995

-3-

#### 7:26E-1.5 and 7:26C-1.2 Certifications

The required certifications are presented in Appendix A.

#### **Declaration of Environmental Restrictions**

A draft DER, excluding the "as-built" drawings showing the metes and bounds of the remediated areas, is presented in Appendix B. The "as-built" drawings will be submitted with the final DER after the remedial action is completed. The remedial action Operation and Maintenance Plan is also presented in Appendix B.

#### **Draft Schedule**

A draft schedule for the remedial work is attached. The construction phase of the project would be completed in September 1995 (weather permitting) assuming that all agencies (USEPA, NJDEP, and Pinelands Commission) approve this RAW addendum and required permits by July 1. A revised schedule with target calendar dates and milestones will be prepared and submitted to NJDEP no later than 7 days after the Department approves the RAW.

#### Remedial Action Report

The Remedial Action Report required by Section 6.6 of the Technical Requirements will be prepared and submitted to NJDEP no later than 30 days after the remedial action is completed.

#### **HSWA Permit Modifications**

The Department's letter indicates that the HSWA permit will be modified to acknowledge the corrective measures performed at the site. Lenox will not proceed with the proposed remedial action until the HSWA permit is modified.

#### **Pinelands Commission Comments**

The completed Pinelands Comprehensive Management Plan Application is presented in Appendix C and the stormwater runoff calculations using the USDA TR-55 method are

Continued . . .

Frank Faranca New Jersey Department of Environmental Protection June 15, 1995

-4-

presented in Appendix D. Comment 6c. in the Department's May 15 letter is addressed above.

Please call me if you have any questions or require additional information.

Very truly yours,

**EDER ASSOCIATES** 

James M. Barish

Project Manager/Hydrogeology

cc:

- A. Park (USEPA)
- T. DeJesus (Pinelands Commission)
- L. Fantin, Esq.
- J. Kinkela
- G. Berman

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#### LENOX CHINA POMONA, NEW JERSEY

#### REMEDIAL ACTION SCHEDULE

												D.A	TE.										•,	
TASK	JULY				AUGUST			SEPTEMBER			OCTOBER				NOVEMBER				DECEMBER					
Receive NJDEP Approval (*)					<u> </u>			<u> </u>																
Prepare Fence Specs												<u> </u>												
Prepare Membrane Liner Specs									<u> </u>											<u></u>				
Prepare Asphalt Cap Specs						1.75							ļ											
Bid Solicitations		<u> </u>	ļ		*		,		<u> </u>	<u> </u>														
Bid Review and Award Contract			<u> </u>	ļ																				<u> </u>
Mobilize to Site					ļ <u>.</u>	<u> </u>		ļ																
Install Membrane Liner						<u> </u>				,														
Install Fencing								<u> </u>	<u> </u>						<b></b>	ļ								
Install Asphalt Cap								į				1									<b>.</b>			<u> </u>
On-site NJDEP Inspection								<u>                                     </u>																
Prepare Remedial Action Report								ļ										ļ						
Submit Draft Remedial Action Report to NJDEP																								
NJDEP Review			1																					
Receive Draft NJDEP Comments on Draft Report																								
Submit Revised Remedial Action Report to NJDEP																						,		
Final NJDEP Review and Approval																								

<sup>(\*)</sup> Starting date based on Lenox receiving NJDEP, USEPA, and the Pinelands Commission approval on the RAW, RAW Addendum and all permit applications.

#### **CERTIFICATIONS**

The following certifications are made in accord with N.J.A.C. 7:26E-1.5 and 7:26C-1.2.

I certify under penalty of law that the information provided in this document is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Nicholas Nahorniak

Vice President of Technical Services

Lenox China

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Louis A. Fantin, Esq.

Vice President, Secretary and Lenox

Counsel

Lenox, Incorporated

APPENDIX B

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**DECLARATION OF ENVIRONMENTAL RESTRICTIONS** 

Prepared by:

Louis A. Fantin, Esquire

This Declaration of Environmental Restrictions, made as of the \_\_\_\_\_\_ day of \_\_\_\_\_, 1995, by Lenox Incorporated, 100 Lenox Drive, Lawrenceville, New Jersey 08648, together with its successors and assigns (collectively "Owner").

#### WITNESSETH:

WHEREAS, Owner is the owner in fee simple of certain real property (the "Property") designated as Lot 1, Block 453, on the tax map of the Township of Galloway, Atlantic County, more particularly described on Exhibit A attached hereto and made a part hereof; and

WHEREAS, the New Jersey Department of Environmental Protection and Energy ("Department") has issued a Remedial Action Workplan Approval on May 15, 1995, concerning the Property in which the Department has approved the use of non-residential soil standards, institutional controls, and/or engineering controls in accordance with P. L. 1993 c. 139 (S-1070); and

WHEREAS, this Declaration itself is not intended to create any interest in real estate in favor of the Department, nor to create a lien or encumbrance against the Property, but merely is intended to reflect the regulatory and statutory obligations imposed as a condition of using non residential standards; and

WHEREAS, the areas described on Exhibit B attached hereto and made a part hereof (the "Affected Areas") contain contaminants; and

WHEREAS, the type, concentration and specific location of the contaminants are described on one or more diagrams, maps and/or tables on Exhibit B attached hereto and made a part hereof; and

WHEREAS, to prevent the potential for migration of the contaminants and unacceptable risk of exposure to the contamination to humans or the environment, an asphalt cap or flexible membrane liner constructed of 60 mil, textured high density polyethene and a fence is in place at the Property, at location 1 shown on Exhibit B; and

WHEREAS, to prevent an unacceptable risk of exposure to the contamination to humans or the environment, a fence is in place at the Property, at location 2 shown on Exhibit B; and

\*F:\F\$3\02082003\DOC\$\ENVRESTR.ICT 6/6/95 11:58 WHEREAS, in accordance with the remedial approval, and in consideration of the terms and conditions of the remedial approval, and other good and valuable consideration Owner has agreed to subject the property to certain statutory and regulatory requirements which impose restrictions upon the use of the Property, and to restrict certain activities at the Property, as set forth below; and

WHEREAS, Owner intends to notify all interested parties that such regulatory and statutory restrictions shall be binding upon and enforceable against owner and Owner's successors and assigns while such own and/or operate at the Property.

NOW, THEREFORE, Owner agrees to be subject to the regulatory and statutory requirements applicable to those who seek to remediate property to non-residential standards and hereby notifies all interested parties, Owners, and operators that the applicable regulations and statutes require of Owner and operators while owning or operating the Property as follows:

- 1. Restricted Uses. Owner, and all operators of such portions of the Property, shall restrict use of the Affected Areas pursuant to paragraphs 2 and 3.
- 2. Emergencies. In the event of an emergency which presents a significant risk to human health, safety, or the environment, the application of Paragraph 1 above may be unilaterally suspended by the Owner, provided the Owner:
  - i. Immediately notifies the Department of the emergency;
  - ii. Limits both the actual disturbance and the time needed for the disturbance to the minimum reasonably necessary to adequately respond to the emergency;
  - iii. Implements all measures necessary to limit actual or potential, present or future risk of exposure to the residual contamination to humans or the environment; and
  - iv. Implements restoration of the disturbed portion of the Affected Areas to the preemergency conditions to the extent reasonably possible, and provides a report to the Department of such emergency efforts.
- 3. Alterations, Improvements, and Disturbances. Owner and operators shall not make, nor allow to be made, any alteration, improvement, or disturbance in, to, or about the Affected Areas which creates an unacceptable risk of exposure to contamination in the Affected Areas to humans or the environment, or results in a disturbance of any engineering control designed to contain or reduce exposure to the contaminants, without first obtaining the express written consent of the Department, which consent shall be given or withheld at the reasonable

discretion of Department. Nothing herein shall constitute a waiver of the Owners obligation to comply with all applicable laws and regulations.

- 4. Exempted Projects. Express written consent of the Department is not required for alteration, improvement, or disturbance that meets the following:
  - (a) provides for restoration of any disturbance of an engineering control to pre disturbance conditions within sixty days,
  - (b) does not allow an exposure level above those noted in Exhibit B, provided that all applicable worker health and safety laws and regulations are followed during the alteration, improvement, or disturbance.
- 5. Operations & Maintenance. Owner agrees to maintain the integrity of the engineering controls in the Affected Areas in accordance with the NJDEP approved Operations and Maintenance Manual.
  - 6. Notice to Lessees and other Holders of Property Interests.
    - (a) Owner shall cause all leases, grants, and other written transfers of interest by the owner in the Affected Areas to contain a provision expressly requiring all holders thereof to take the property subject to the use restriction and not to violate any of the conditions of this Declaration of Environmental Restrictions.
    - (b) Nothing contained in this paragraph 5 shall be construed as limiting any obligation of Owner to provide any notice required by any law, regulation, or order of any governmental authority.
- of, and shall be enforceable against any person who knowingly violates this Declaration, solely by the Department. A violation of this Declaration of Environmental Restrictions, shall not have an adverse impact on the status of the ownership of and title to the Property. To enforce violations of this Declaration of Environmental Restrictions, the Department may initiate an action in Superior Court or as otherwise allowed by law against any person who is in any way responsible for a violation hereof and seek all available remedies, including without limitation, penalties and injunctive relief. Such enforcement proceedings shall not be initiated against past owners or operators who have not violated this Declaration.
- 8. Severability. If any court or other tribunal determines that any provision of this Declaration is invalid or unenforceable, such provision shall be deemed to have been modified automatically to conform to the requirements for validity and enforceability as determined by such court or tribunal. In the event that the provision invalidated is of such a nature that it

cannot be so modified, the provision shall be deemed deleted from this instrument as though it had never been included herein. In either case, the remaining provisions of this Declaration shall remain in full force and effect.

9. Successors and Assigns. This Declaration shall be binding upon Owner and upon Owner's successors and assigns, and the Department, its agents, contractors, and employees, and to any other person performing remediation under the direction of the Department.

#### 10. Termination and Modification.

- (a) This Declaration shall terminate only upon filing of an instrument, executed by the Department, in the Office of the Register of Deeds and Mortgages of Atlantic County, New Jersey, expressly terminating this Declaration.
- (b) Owner may request in writing at any time that the Department modify or terminate this Declaration of Environmental Restrictions or execute termination proceedings based on, for example, the owner's proposal that the property does not pose an unacceptable risk to human health or the environment. Within 90 calendar days after receiving the request the Department shall either:
  - i. execute the termination or modification Declaration; or
  - ii. issue a draft notice of intent to deny.

The Department shall set forth in a draft notice of intent to deny the request its basis for its decision. The owner can respond to the draft denial by providing new or additional information or data. The Department shall review any such new or additional information and issue a final decision to execute the agreement or deny the request within 60 calendar days of the Department's receipt of the owner's response.

IN WITNESS WHEREOF, Owner has executed this Declaration as of the date first written above.

ATTEST:

Bv:

Louis A. Fantin, Esquire

Vice President and General Counsel

LENOX INCORPORATED

y: 🔀

erome C. Ciszewsl

President

#### STATE OF NEW JERSEY )

) SS.:

#### **COUNTY OF MERCER**

I certify that on June 14, 1995, personally came before me, and this person acknowledged under oath, to my satisfaction, that:

- (a) this person is the Secretary of Lenox Incorporated, the corporation named in this document;
- (b) this person is the attesting witness to the signing of this document by the proper corporate officer who is the president of the corporation;
- (c) this document was signed and delivered by the corporation as its voluntary act and was duly authorized;
- (d) this person knows the proper seal of the corporation which was affixed to this document; and

(e) this person signed this proof to attest to the truth of these facts.

Print Name:

Title: Secretary

A. FANTIN

Signed and sworn/before me on

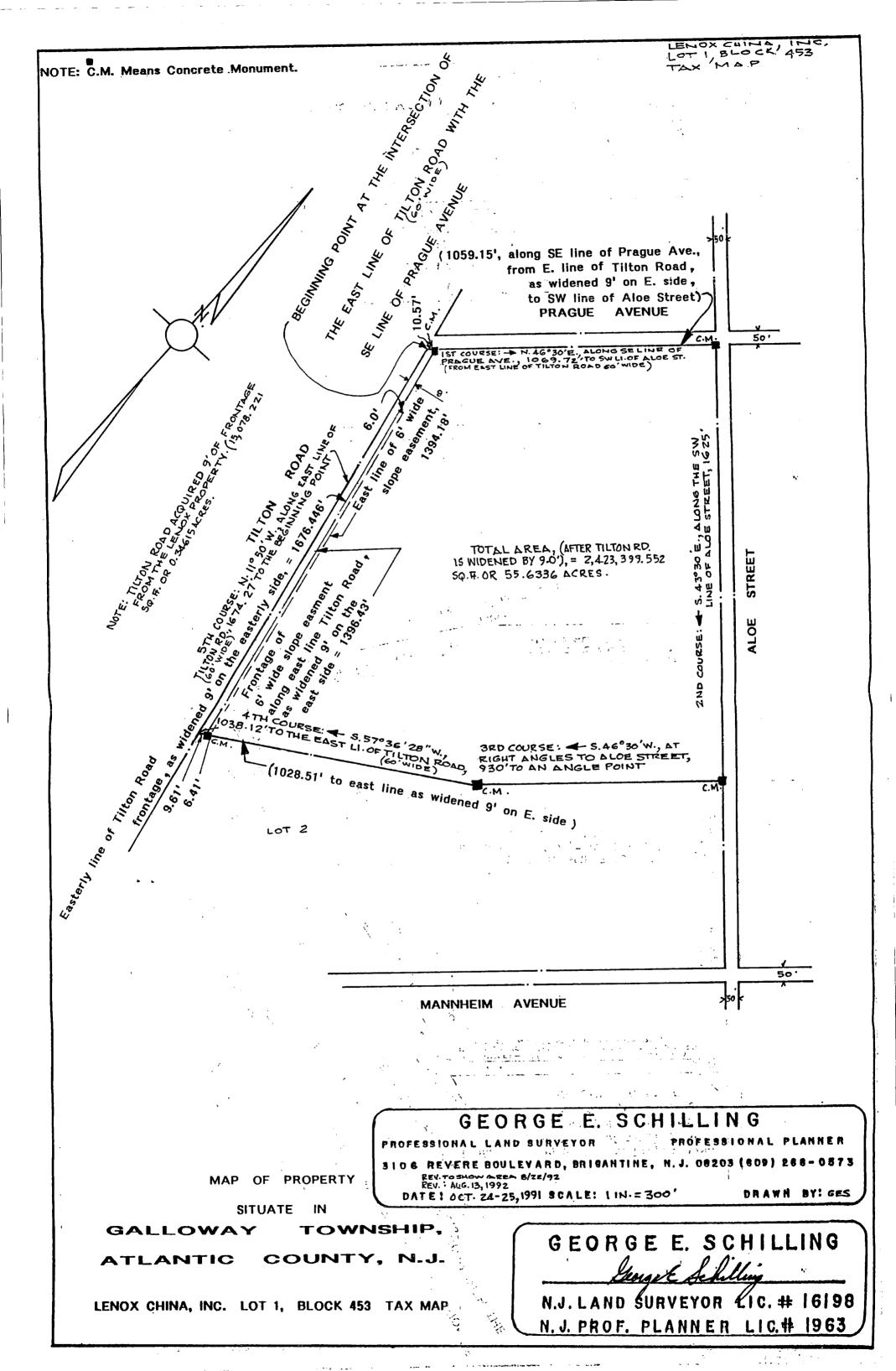
, 1995.

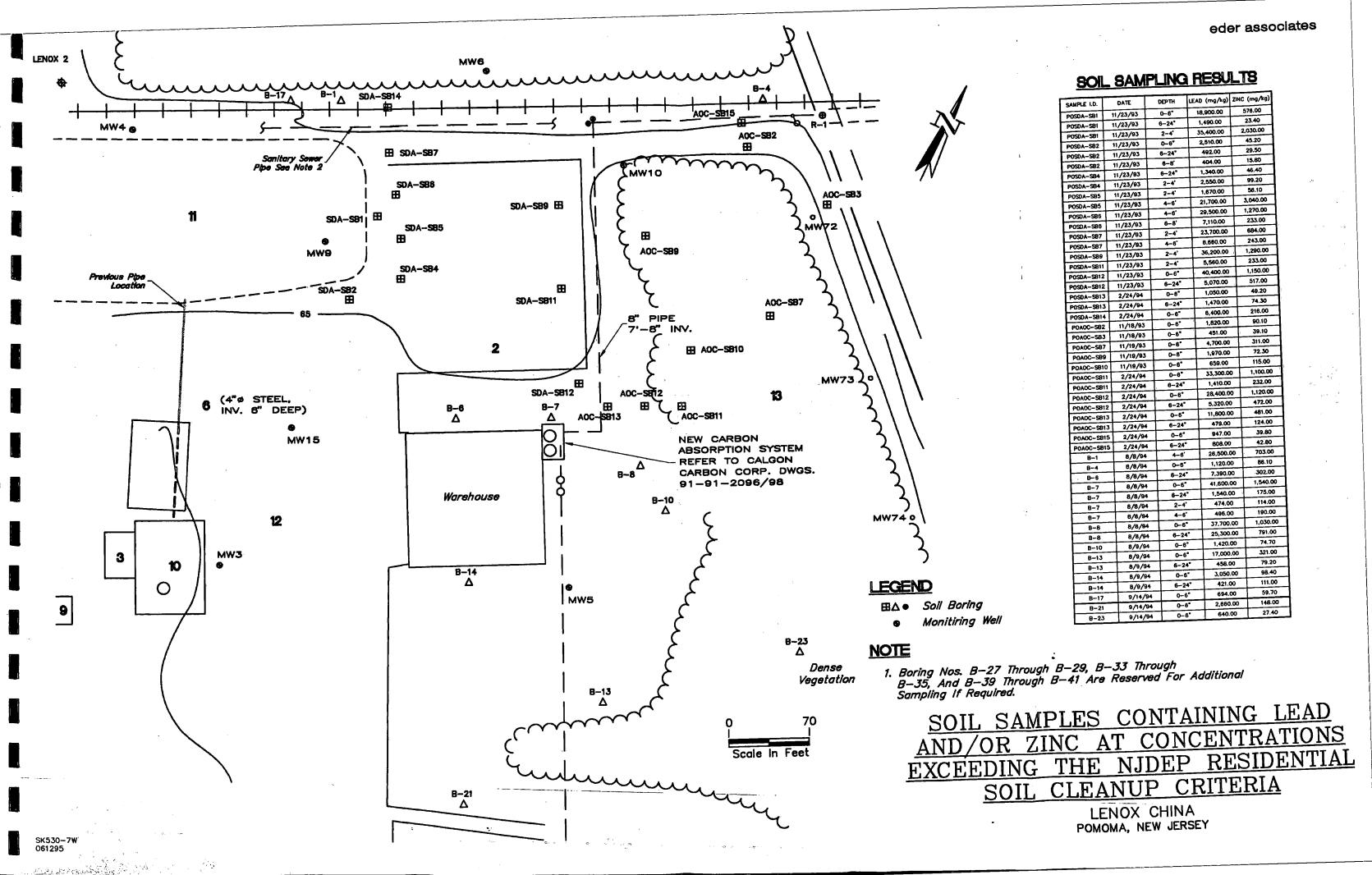
Notary Public

HELEN CHAPKO NOTARY PUBLIC OF NEW JERSEY MY COMMISSION EXPIRES FEB. 6, 1997

# EXHIBIT A

1	Metes and Bounds Description of Property	
	EXHIBIT B	
	Description of Affected Areas	
	-	
Contaminant	Concentration	Location
[List contaminants]	[List concentrations] contaminants by reference to exhibits A,B,C	[Describe location of





# SWMU No. 2 - Area of Concern Operation and Maintenance Plan

Lenox personnel will regularly inspect the asphalt and flexible membrane liner caps, the perimeter fencing, and the groundwater monitoring wells to identify structural deterioration or damage that could mobilize contaminants in the subsurface soil or pose a risk to public health. An inspection log will be filled out after each inspection is completed and will include the following information:

- Name of Inspector
- Date of Inspection
- Problems Identified
- Corrective Actions

The logs will be filed with John Kinkela of Lenox China, who will be the records custodian for this project.

### **Inspection Frequency**

The inspection and maintenance schedule for the caps, fencing, and monitoring wells is presented in Table B.1. Notwithstanding anything to the contrary, operation and maintenance activities and other uses that will not disturb the waste material under SWMU No. 2 and the AOC can be performed without NJDEP approval.

## Inspection Activities, Problem Identification, and Corrective Actions

The proposed inspection frequency will allow Lenox to identify problems with the SWMU No. 2 and the Area of Concern engineering controls and initiate corrective actions in a timely and cost effective manner. A sample inspection form is presented in Table B.2.

#### Asphalt Pad

The asphalt pad will be inspected for cracks, deterioration erosion, or uneven settlement. Evidence of structural damage to the pad or curb, or poor drainage will also be noted.

Visible cracks will be sealed with hot tar within 14 days after the damage is reported. The entire asphalt surface will be sealed annually using a commercial sealant.

#### • Flexible Membrane Liner

The flexible membrane liner will be inspected for tears, poor drainage, uneven settlement, or dislodgement from the anchors.

Tears will be patched according to the manufacturer's specifications within 14 days after the damage is reported.

#### Fence

The fence will be inspected for holes in the chain-link mesh or damage to the fence posts. Fence repairs will be made by local contractors within 7 days after the damage is reported.

Groundwater Monitoring Wells

The groundwater monitoring wells will be inspected for physical damage and repaired within 14 days by a New Jersey licensed well driller. The field inspection will include:

- verifying that all wells are locked and that the locks function properly.
- checking the integrity of the steel protective casing and concrete collar.
- checking the for cracks.

# LENOX CHINA POMONA, NEW JERSEY

#### TABLE B.1

# **INSPECTION AND MAINTENANCE SCHEDULE**

	Item	Inspection Frequency
a.	Asphalt Pad	Quarterly
b.	Flexible Membrane Liner	Quarterly
c.	Fence	Quarterly
d.	Groundwater Monitoring Wells	Quarterly

	Item	Maintenance Frequency
a.	Asphalt Pad	Annual Commercial Sealant Application
b.	Flexible Membrane Liner	As Needed
c.	Fence	As Needed
d.	Groundwater Monitoring Wells	As Needed

#### OPERATION AND MAINTENANCE LOG Table B.2 AREA OF CONCERN AND SWMU NO. 2 LENOX CHINA, POMONA, NEW JERSEY

Name of Inspector	Date of Inspection	Problems Identified	Corrective Measures
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APPENDIX C

The applicant and <u>all</u> property owner(s) must sign the application or provide separate written authorization bearing their signature. The applicant's signature must be notarized by a Notary Public or signed by an attorney licensed to practice in New Jersey. Applications not properly signed and notarized will be returned. Upon receipt of a new application, the Commission will notify applicant and agent (if any) by return mail of receipt of application. Only the listed applicant and agent will receive copies of Commission letters.

Please allow 30 days for the Pinelands Commission to review any information submitted. Within 30 days of receipt of any information, the Commission will determine whether the application is complete or additional information is required to complete the application.

If a development application is located in a municipality whose land use ordinances have been certified (approved, see item 10), the Commission will respond in writing within 30 days. If a development application is located in a municipality whose land use ordinances have <u>not</u> been certified (approved, see item 10), the Commission will respond within 30 days if a development application is incomplete and within 90 days if the application is complete. Although we would like to respond more quickly, the large number of applications received prevents us from doing so. Telephone calls during the 30 day review period concerning application status tend to delay the review process. An applicant can only be advised that an application is under review during the 30 day review period.

#### TYPE OR PRINT CLEARLY

Tel. # Home ( )	State N.J. Work (60	
Name of Property Owner(s)	Lenox, Inc.	
Mailing Address	100 Lenox Drive	
·	State N.J.	Zip 08648
If yes, agent's name Louis  100 Lenox Drive  Address	<del></del>	
Location of Property: St		_
Block No. 453 Lo	t No. 1 Tot Lot If	
<del></del>		Atlantic
Municipality Galloway Town	ship <b>County</b> _	ACTAILLIC
Municipality Galloway Town Municipal Zoning District		
Municipality Galloway Town Municipal Zoning District Existing use of parcel (x	(if known)	
Municipal Zoning District	(if known)  (i): X Vacant (no start	ructures) cribe below)
Municipal Zoning District Existing use of parcel (x	(if known)  (i): X Vacant (no strong in the	ructures) cribe below)  The parcel known
Municipal Zoning District Existing use of parcel (x The parcel known as the AOC is	(if known)  (): X Vacant (no start	ructures) cribe below)  The parcel known drainage swale nort
Municipal Zoning District Existing use of parcel (x  The parcel known as the AOC is  SWMU No. 2 contains an asphalt	(if known)  (i): X Vacant (no structure of the structure	ructures) cribe below)  The parcel known drainage swale nort of the warehouse.

7. 4	Type of Application (x)
	A Residential B Commercial/Industrial C Resource Extraction D Forestry E Letter of Interpretation: identify purpose
	F. Waiver of Strict Compliance G. Public Development (municipal, county, etc.) H. Recreation Vehicle Events I. Other, please identify
8.	A. Source of existing/proposed drinking water supply (x)
	Existing X Well Public System Proposed Public System
	B. Type of existing/proposed wastewater treatment (x)
	Existing X On Site Septic On-Site Septic Public Sewer Proposed Public Sewer
9.	To your knowledge, has an application previously been filed with the Pinelands Commission for this parcel? No $\frac{X}{X}$ Yes If yes, application number $85-0666.05$ (if known)
10.	For all applications for a Waiver of Strict Compliance, all applications for a Letter of Interpretation, and for all applications in municipalities whose land use ordinances have <u>not</u> been certified (approved) by the Pinelands Commission (see instructions, item 10), you are required to provide written notice or a copy of this application form to the municipal clerk, the municipal environmental commission (if any) and the county clerk in which your proposed development is located.
	(x) Yes, I am filing one of the three types of applications discussed in No. 10 above and I have complied with this requirement.
11.	I have attached supplemental information to this application: $\underline{x}$ Yes $\underline{\hspace{1cm}}$ No Please note that all supplements must be listed on page 4 or an attached sheet, and any list or attachments must be firmly secured to the application form.
	I acknowledge that most applications to the Commission require information in addition to that which I provide on this application form. I will attempt to provide additional information as may be necessary to complete this application. I hereby authorize the staff of the Pinelands Commission to conduct such on-site inspections of the parcel as are necessary to review this application and ensure compliance with the requirements of the Pinelands Comprehensive Management Plan. I am aware that false swearing is a crime in this State and is subject to prosecution.
	I hereby certify that the information furnished on this application form and all supplemental materials is true.
	Levox Chera:
Sworn this/	with subscribed to before the Signature of Applicant Bull of Manfacture
·	I hereby acknowledge and consent to the filing of this application.
	Alla Color By Signature of Property Owner(s)
(As: 1	the signature of the applicant)  Vice Presiden

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## SUPPLEMENTAL INFORMATION

See	Draw	ing	No.	3 for	the	AOC	and	SWMU	No.	2	locati	ion.	This	Dra	wing	was :	inclu	ded with
the	Reme	dial	Act	ion V	Nork	Plan	prov	rided	to t	he	Pinela	ands	Commi	issio	n in	Apri.	199	5
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APPENDIX D

The amount of runoff from rainfall occurring over a 24 hour period during a 2, 10, and 100 year storm event in the Pomona area was determined using data from the National Weather Service Technical Paper #40 (Rainfall Frequency Atlas of the United States) and the calculations described in the United States Department of Agriculture TR-55 guidance document. Assuming a 100 percent runoff factor as a worst-case scenario, the amount of rainfall for the storm events mentioned above is as follows:

Frequency (years)	Total Rainfall (inches)
100	7.4
10	5.3
2	3.5

The combined area of the drainage swale (area to be capped with HDPE liner) and the proposed parking lot (area to be capped with asphalt pavement) is approximately 2,700 square yards. The total calculated runoff from these two areas during the 10 year storm event is 10,800 cubic feet.

Calculations show that the amount of runoff currently discharged to the Area of Concern would increase by capping the drainage swale and the proposed parking lot. The remedial design presented in the RAW will be modified so that runoff from the HDPE and asphalt capped areas is controlled and channeled northeast of the warehouse, outside of the Area of Concern (Figure D.1). The runoff will be routed to a graded recharge area (12,000 cubic feet) large enough to contain all of the runoff from this area. The diverted runoff would percolate to groundwater through uncontaminated soil. The calculations also show that the current stormwater retention area is large enough to contain all of the runoff produced over a 24 hour period during a 100 year storm event.

